

## Joint Exercise Prepares Agencies for Nuclear Fuel Accident

KDHE's Radiation and Asbestos Control Program participated with federal, state and Shawnee County agencies in a June 14 exercise of a mock train derailment involving a U.S. Navy railcar loaded with spent nuclear fuel.

The joint exercise was hosted by Kansas Department of Emergency Management in collaboration with U.S. Naval Nuclear Propulsion Program, and included role players from KDEM, KDHE, U.S. Navy, Kansas State Highway Patrol, and first responders from the Topeka Fire Department, Police Department, and EMTs along with individuals portraying roles as members of the media and public.

It was the first exercise of its type conducted in the Midwest. Most of these exercises are conducted closer to the Navy's ports where nuclear powered ships are docked.

The Navy's spent fuel is shipped in specially designed containers by rail. Since 1957, the Propulsion Program has made more than 750 container shipments nationwide to its Idaho repository. According to Navy estimates, that translates into more than 1.5 million miles of rail travel; all without an accident.

An M-140 container is the current Naval model for fuel transport. Its stainless steel walls are 14 inches thick, and the cask design weighs in excess of 300,000 pounds. The containers are engineered to withstand catastrophic accidents that could release radiation across communities and counties during its transport.

Jeff Clark led a KDHE team onto the crash site to conduct a radiological survey to determine if the M-140 had suffered a radiation leak as a result of the vehicular accident on a Union Pacific Railroad crossing in North Topeka. After the survey team of Clark, Stewart Steen, Shay Hannah, James Johnson and Kim Steves completed their radiologic scan and determined the accident scene safe and secure, KDHE then provided on-site assistance as needed to the Fire Department's Incident Commander.

As the training exercise continued, a crowd of more than 100 observers from various federal, state and local organizations listened through loudspeakers to participants play out their roles using wireless microphones. This added level of realism clearly demonstrated the level of cooperation necessary between responding teams to



**A team from KDHE surveyed the M-140 shipping cask for radiation leaks during a mock derailment exercise June 14 in North Topeka.**

assure a safe and successful operation.

It also provided a moment of levity during the mock drill.

A Topeka police officer performing crowd control was dealing with three persistent neighborhood women, who wanted to know what was going.

At one point, a woman pointed toward the accident scene and shouted, "What's that?" The police officer looked at her gestured direction, and calmly responded, "that's a train ma'am. Now, you'll need to step back."



**The Navy's M-140 fuel shipping container weighs more than 300,000 pounds and has stainless steel walls 14 inches thick.**